

# Exhibit A



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VIA EMAIL AND OVERNIGHT MAIL

May 22, 2012

Ms. Tanya Mitchell  
U.S. Environmental Protection Agency, Region 2  
290 Broadway, 19<sup>th</sup> Floor  
New York, NY 10007

Re: *Raritan Bay Slag Superfund Site*  
*Engineering Evaluation/Cost Analysis*

Dear Ms. Mitchell:

NL Industries (NL) submits the enclosed Engineering Evaluation/Cost Analysis (EE/CA) for the Raritan Bay Slag Superfund Site (Site), prepared by Advanced GeoServices Corp. on behalf of NL.

As you know, NL has, with the encouragement and guidance of the U.S. Environmental Protection Agency (USEPA), been working to prepare the EE/CA for the past several months. That process involved a tremendous amount of work by Advanced GeoServices, NL's risk assessment consultant Gradient Corp., and NL's in-house personnel. More than 1000 pages of reports and sampling data were reviewed and analyzed, including both the Remedial Investigation (RI) and Feasibility Study (FS). Then, hundreds of hours were spent analyzing various removal action alternatives and the equipment, materials and logistics of implementing such alternatives to evaluate the effectiveness, implementability and cost of each alternative. Included within the evaluation of the implementability of the removal alternatives was an analysis of the impact to the community in terms of factors such as duration of the work, creation of traffic congestion, dust, noise and exhaust emissions, and risk of harm to the public.

The enclosed EE/CA reflects the results of this work. You will see that NL's approach in the EE/CA is consistent with NL's recommendation in its comments to the National Remedy Review Board (NRRB) that the Site be addressed through a phased approach. The most immediate goal is to address issues in the publicly-owned, publicly-accessed area of the Site, which is the portion of the Site located in Old Bridge Township. Under any removal alternative ultimately selected by USEPA, the Principal Sources (i.e., the slag pots, battery casings, and immediately adjacent sediment and soil most impacted by the slag and casings) in the Old Bridge portion of the Site will have to be removed. Moreover, those Principal Sources drive the majority of the risk at the Site. It makes sense to focus first on the removal activities that will have the greatest impact in reducing risks at the Site, and the EE/CA is a first phase measure designed to do just that. The approach articulated in the EE/CA has the additional benefit of

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allowing the public area of the Site, including the Old Bridge beach and park areas, to be reopened to the public as quickly as possible.

Although NL's comments to the NRRB expressed concerns regarding Preliminary Remediation Goals (PRGs) identified in the FS for certain constituents, NL elected not to revisit those concerns in the EE/CA. Instead, NL adopted USEPA's 232 mg/kg lead PRG from the FS and utilized EPA's sampling data from the RI to determine the vertical and horizontal limits of excavation for purposes of the removal alternatives evaluated in the EE/CA.

The four alternatives evaluated in the EE/CA consist of the required no action alternative, two different variations of a removal with on-Site containment, and removal with off-Site disposal. One of the on-Site containment alternatives evaluated is a new approach referred to as "Macroencapsulation." Under the standard on-Site containment approach, all of the Principal Source material would be placed in an engineered cell in the upland area of the Site and capped with a multi-layer geosynthetic and soil cover. The Macroencapsulation approach would involve relocating the massive slag pots (each weighing approximately 450 pounds) to a position behind the current seawall and on the seaward side of the Park, where they would be encapsulated with a cement-type additive, capped on the top and fully covered on the front by a restored seawall. The remaining Principal Source material (such as impacted soil and sediments – which generally have lower concentrations of contaminants) would be contained in a smaller engineered capped containment cell in the upland area of the Site.

NL has included this Macroencapsulation approach to address concerns expressed by Old Bridge residents during Community Advisory Group meetings (including concerns regarding the final height of the containment cell, cell capacity, the impact of the cell on drainage from the upland area, etc.). The Macroencapsulation approach would alleviate those concerns by allowing for a smaller upland containment cell, and one that contains materials with much lower contaminant concentrations. Moreover, the Macroencapsulation approach would provide additional protection to the Park and coastline against erosion damage from storm events. Implementation of the Macroencapsulation approach would also minimize transport and movement of excavated material within the Site, and therefore minimize dust, noise and truck emissions associated with the cleanup.

Both of the on-Site containment alternatives have the same effectiveness as the off-Site disposal remedy, provided that maintenance of the containment cells occurs. Maintenance of the containment areas over time will be standard and routine. However, the off-Site disposal alternative (in addition to costing almost twice as much) has several significant disadvantages compared to each of the on-Site containment alternatives. The off-Site disposal alternative would require at least two years to implement, and possibly much longer depending on limitations associated with truck and disposal facility availability and truck staging space at the Site or on nearby local roads. The Park and beach areas would be unavailable for public use during the duration of the project. By comparison, implementation of either of the on-Site containment alternatives would require much less time to complete (just 6 to 12 months).

Additionally, the off-Site disposal alternative would have substantial detrimental impacts to the local community associated with the trucking of materials off-Site. The off-Site disposal alternative would generate approximately 112,000 tons of impacted materials that would have to be trucked to off-Site disposal facilities and clean replacement materials trucked to the Site. This

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would equate to approximately 9,300 fully loaded truck trips and an equal number of empty truck trips, for a total of more than 18,600 truck trips through the community. The truck traffic to transport materials to off-Site disposal facilities would use Route 35 in the vicinity of the Site, which statistics show already is among the roadways most prone to accidents in the entire state. The local roads near the Site are particularly ill-suited for the task because of the minimal shoulders, presence of single lane bridges, and the fact that they are already overloaded with existing traffic. With trucks more likely to be involved in vehicle accidents than cars according to government statistics, the thousands of additional trucks on the road would substantially increase the chances for vehicle accidents and potentially serious injuries. The many thousands of additional truck trips would at a minimum significantly increase traffic congestion and associated delays, and would also increase noise, dust and exhaust emission pollution, all of which would detrimentally impact local businesses and quality of life of residents of the community.

Taking all of these factors into account, NL believes that the on-Site containment alternatives present the best remedial options for the Site. NL is willing to undertake the performance of either of the two on-Site containment alternatives (Alternatives 2A or 2B), as described in the EE/CA. As noted earlier, NL believes that it makes sense to remove Principal Source materials in the Old Bridge portion of the Site because doing so will accomplish the dual goals of eliminating the majority of the risks identified for the Site and reopening the Old Bridge waterfront to the public. Ideally, NL would like to start the work in 2013. However, much planning, engineering and contracting work must occur before NL could start the work at the Site. Thus, for NL to be able to begin the work in 2013, NL and USEPA will need to reach agreement on the performance of the work within the next two or three months.

NL looks forward to USEPA's response to NL's proposal, and we would be happy to answer any questions USEPA may have regarding any of the alternatives analyzed in the EE/CA.

Very truly yours,



Courtney J. Riley

Enclosure

cc: Frank Cardiello, Esq., USEPA, Region 2  
The Honorable Owen Henry, Old Bridge Township  
Mr. Dave Samuel, CME Associates  
Christopher R. Gibson, Esq., Archer & Greiner